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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,724	11/29/2001	Hirokazu Kawamoto	862.C2450	1850
5514	7590	10/31/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			WOO, ISAAC M	
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DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/995,724	Applicant(s) KAWAMOTO ET AL.	
	Examiner Isaac M. Woo	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-48 and 58-73 is/are pending in the application.
- 4a) Of the above claim(s) 25-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 58, 60, 61, 63-66, 68-70, 72 and 73 is/are rejected.
- 7) ☒ Claim(s) 59, 62, 67 and 71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/29/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 29, 2005 has been entered.

2. Claims 58-73 are newly added. Claims 1-24 and 49-57 are canceled. Claims 25-48 are withdrawn. The pending claims are 58-73

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 72 is rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As set forth in MPEP 2106 (II) (A):

A. Identify and Understand Any Practical Application Asserted for the Invention

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600,1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful. Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

Regarding claim 72, a printer driver program for setting print options with *no physical structure of the machine in terms of its hardware or hardware and software combination*. Because the limitation of claim 72, "code" is software program that are not embedded any a computer-readable medium and run by any a computer or machine. Therefore, the claim is not a statutory system and should be rejected under § 101 as not being tangible.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 58 and 60-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (U.S. Patent No. 5,899,985):

With respect to claim 58, Tanaka discloses, a memory (61, main memory, fig. 2, col. 14, lines 3-9) configured to store a principal rule (110, rule base, fig. 21, col. 2, lines 34-43, col. 2, lines 53-62) that corresponds to a part of the conflict process rules (101, matching module, fig. 1, col. 3, lines 1-7, matching module matches the rules stored in the rule base and generate conflict sets of rules and rules, step 70 to step 71, fig. 4); and an inference engine configured (from 10, inference processing module, fig. 1, 102,

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conflict resolving module, col. 3, lines 8-24) to generate a complementary rule (from the conflict resolving module, new work memory element is created to the work memory 120, fig. 21) that corresponds to the rest of the conflict process rules based on the principal rule stored in the memory (110, rule base, fig. 21, col. 2, lines 34-43, col. 2, lines 53-62), (step 142-143, fig. 26, col. 3, lines 25-34), and to additionally write the complementary rule in the memory (120, write on to the work memory, fig. 21, fig. 26, col. 3, lines 14-24, complementary rules are generated by the conflict resolving module and resolves the conflict and stored (write) on the work memory 120, fig. 21, step 142-143, fig. 26, col. 2, lines 33-67 to col. 3, lines 1-35).

With respect to claim 60, Tanaka discloses, conflict process rules as a conflict rule description file, see (120, work memory saves data as file form, col. 13, lines 12-19).

With respect to claim 61, Tanaka discloses, conflict rule description file is described in accordance with a predetermined markup language, see (col.12, lines 65-67 to col. 13, lines 1-11, graphical user interface, menu mode and multi-windows are displayed with browser, markup language).

Claim Rejections - 35 USC § 103

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 63-66, 68-70 and 72-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (U.S. Patent No. 5,899,985) in view of Ta et al (U.S. Patent No. 5,500,715, hereinafter, "Ta").

With respect to claim 63, Tanaka discloses, applying the plurality conflict process rules stored in the memory, see (step 141-143, fig. 26, col. 3, lines 25-35). Tanaka does not explicitly disclose, user interface for selection of print options, a conflict manager configured to resolve a conflict between the print options input via the user interface. However, Ta discloses, UI 14 (user interface) for relevant print menu information, see (col. 4, lines 52-67 to col. 5, lines 1-17, 104, 106, select option from pc setup menu, fig. 1, col. 7, lines 45-67 to col. 8, lines 1-5). And Ta discloses, print menu setup confliction by the user are resolved, see (col. 9, lines 28-53). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating user interface for selection of print options, a conflict manager configured to resolve a conflict between the print options input via the user interface as discussed by Ta. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to use such a

modification because that would provide Tanaka's system the enhanced and user-friendly user interface to resolve print job confliction in the printing management system.

With respect to claim 64, Tanaka discloses, the plurality of conflict process rules, see (101, matching module, fig. 1, col. 3, lines 1-7, matching module matches the rules stored in the rule base and generate conflict sets of rules and rules, step 70 to step 71, fig. 4). Tanaka does not explicitly disclose, description of an update command of the user interface. However, Ta discloses, description of an update (changes setup menu) command of the user interface, see (col. 8, lines 28-54). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating description of an update command of the user interface as discussed by Ta. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to use such a modification because that would provide Tanaka's system the enhanced and user-friendly user interface to update the user interface in the printing management system.

With respect to claim 65, Tanaka discloses, user interface (col. 12, lines 65-67 to col. 13, lines 1-11) and conflict manager, see (step 141-143, fig. 26, col. 3, lines 25-35). Tanaka does not explicitly disclose, user interface to change a display status of a display item of the setting state of the print option updated. However, Ta discloses, user interface to change a display status of a display item of the setting state of the

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print option updated, see (col. 8, lines 28-54). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating user interface to change a display status of a display item of the setting state of the print option updated as discussed by Ta. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to use such a modification because that would provide Tanaka's system the enhanced and user-friendly user interface to change the user interface in the printing management system.

With respect to claim 66, Tanaka does not explicitly disclose, grayout or display/non-display of the display. However, Ta discloses, grayout (graysacle) or display/non-display of the display with display screen 310 of PC 5 in the fig. 3, see (col. 7, lines 45-67). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating grayout or display/non-display of the display as discussed by Ta. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to use such a modification because that would provide Tanaka's system the enhanced and user-friendly user interface to display information in the printing management system.

With respect to claim 68, Tanaka discloses, applying the plurality conflict process rules stored in the memory, see (step 141-143, fig. 26, col. 3, lines 25-35). Tanaka does not explicitly disclose, user interface for selection of print options, resolving a

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conflict between the print options input via the user interface. However, Ta discloses, UI 14 (user interface) for relevant print menu information, see (col. 4, lines 52-67 to col. 5, lines 1-17, 104, 106, select option from pc setup menu, fig. 1, col. 7, lines 45-67 to col. 8, lines 1-5). And Ta discloses, print menu setup confliction by the user are resolved, see (col. 9, lines 28-53). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating user interface for selection of print options, resolving a conflict between the print options input via the user interface as discussed by Ta. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to use such a modification because that would provide Tanaka's system the enhanced and user-friendly user interface to resolve print job confliction in the printing management system.

With respect to claim 69, Tanaka discloses, user interface (col. 12, lines 65-67 to col. 13, lines 1-11) and resolving, see (step 141-143, fig. 26, col. 3, lines 25-35). Tanaka does not explicitly disclose, user interface to change a display status of a display item of the setting state of the print option updated. However, Ta discloses, user interface to change a display status of a display item of the setting state of the print option updated, see (col. 8, lines 28-54). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating user interface to change a display status of a display item of the setting state of the print option updated as discussed by Ta. Thus, one having ordinary

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skill in the art at the time the invention was made would have been motivated to use such a modification because that would provide Tanaka's system the enhanced and user-friendly user interface to change the user interface in the printing management system.

With respect to claim 70, Tanaka does not explicitly disclose, grayout or display/non-display of the display. However, Ta discloses, grayout (graysacle) or display/non-display of the display with display screen 310 of PC 5 in the fig. 3, see (col. 7, lines 45-67). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating grayout or display/non-display of the display as discussed by Ta. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to use such a modification because that would provide Tanaka's system the enhanced and user-friendly user interface to display information in the printing management system.

With respect to claims 72-73, Ta discloses, applying the plurality conflict process rules stored in the memory, see (step 141-143, fig. 26, col. 3, lines 25-35). Tanaka does not explicitly disclose, to display user interface for selection of print options, and resolve a conflict between the print options input via the user interface. However, Ta discloses, UI 14 (user interface) for relevant print menu information, see (col. 4, lines 52-67 to col. 5, lines 1-17, 104, 106, select option from pc setup menu, fig. 1, col. 7, lines 45-67 to col. 8, lines 1-5). And Ta discloses, print menu setup confliction by the

user are resolved, see (col. 9, lines 28-53). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify by incorporating to display user interface for selection of print options, and resolve a conflict between the print options input via the user interface as discussed by Ta. Thus, one having ordinary skill in the art at the time the invention was made would have been motivated to use such a modification because that would provide Tanaka's system the enhanced and user-friendly user interface to resolve print job confliction in the printing management system.

Allowable Subject Matter

8. Claims 59, 62, 67 and 71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 59, the prior art (Tanaka) discloses, the memory stores the principal rule. The prior art fails to suggest the claimed features "rule for one state of one of the print options having two states, and does not store any principal rule for the other state, the interface engine generates inverse logic of the principal rule for the one state as the complementary rule for the other state".

Regarding claim 62, the prior art (Tanaka) discloses, the conflict process rule description file. The prior art fails to suggest the claimed features "describes a local rule which can be applied to only a specific printing device, and a universal rule description

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file that describes a universal rule which can be commonly applied to a plurality of printing devices is externally referred to".

Regarding claims 67 and 71, the prior art (Tanaka) discloses, the conflict process rule. The prior art fails to suggest the claimed features "defines a condition for avoiding a conflict between at least two print options among Collate printing, Group printing, Staple finishing and Booklet printing".

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M. Woo whose telephone number is (571) 272-4043. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IMW
October 27, 2005